

Amendments to the Specification and Abstract

In the Specification:

Before paragraph [0002] please insert the heading --BACKGROUND--.

Please replace paragraph [0003] with the following rewritten paragraph:

[0003] When operating a detector in the photon counting mode, the detector's dead time, or delay, is generally problematic. The dead time signifies that time which elapses after a photon is detected, until the detector is again available for detecting a next photon, thus quasi the time that it takes the detector to process an event.

Before paragraph [0006] please insert the heading
--SUMMARY OF THE INVENTION--.

Please replace paragraph [0006] with the following rewritten paragraph:

[0006] ~~The underlying~~ It is an object of the present invention is, ~~therefore, to design and further refine to provide~~ a device ~~of the species~~ for detecting photons of a light beam emanating from a spatially limited source using simple means in a way that will enable a higher photon flux to be detected by the detection device, i.e., the maximum counting rate processible by the detection device to be increased.

Before paragraph [0007] please insert new paragraph [0006.1] as follows:

--[0006.1] The present invention provides an apparatus for detecting photons of a light beam emanating from a spatially limited source. The apparatus includes a detection device including a plurality of detectors forming a three-dimensional array. The three-dimensional array includes a first semitranslucent EMCCD disposed behind a second semitranslucent EMCCD. A light splitting device is disposed in a path of rays of the light beam and configured to split the light beam so as to distribute the photons over the detectors for detection.--.

Please delete paragraph [0007].

Before paragraph [0020], please insert the heading --BRIEF DESCRIPTION OF THE DRAWINGS--.

Please replace paragraph [0020] with the following rewritten paragraph:

[0020] The teaching of the present invention may be advantageously embodied and further refined in various ways. ~~In this regard, reference is made, on the one hand, to the claims that are subordinate to claim 1 and, on the other hand, to the following description of preferred exemplary embodiments of the present invention which makes reference to the drawing. In conjunction with the explanation of the preferred exemplary embodiments of the present invention, generally preferred embodiments and refinements of the teaching are also elucidated. In the drawing, in a schematic view, The present invention is elaborated upon below based on exemplary embodiments with reference to the drawings. The drawings schematically show:~~

Before paragraph [0025], please insert the heading --DETAILED DESCRIPTION--.